Claims

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1. A blue colored dye mixture which contains from 10 to 60 wt% with respect to the total pigment fraction of a blue pigment which is a mixture of the two isomers which can be represented by structural formula [1]

wherein one of X¹ and X² represents NO₂ and the other represents OH, from 60 to 10 wt% with respect to the total pigment fraction of a blue pigment which can be represented by structural formula [2]

wherein R^1 represents $-C_3H_6OCH_3$, $-C_3H_6OC_2H_5$ or $-C_3H_6OC_2H_4OCH_3$, from 10 to 30 wt% with respect to the total pigment fraction of the blue pigment which can be represented by structural formula [3]

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and from 20 to 0 wt% with respect to the total pigment fraction of a blue pigment which can be represented by structural formula [4]

- wherein R² represents a hydrogen atom or a C₁ or C₂ alkyl group, and R³ represents a hydrogen atom, a C₁ or C₂ alkyl group or a C₁ or C₂ alkoxy C₁ or C₂ alkyl group.
- 2. A dye composition in which, in a blue dye mixture according to claim 1, thereis compounded a yellow dye mixture and/or a red dye mixture,wherein

the yellow dye mixture contains from 25 to 75 wt% with respect to the whole pigment fraction of the yellow pigment which can be represented by structural formula [5]

from 60 to 20 wt% with respect to the whole pigment fraction of the yellow pigment which can be represented by structural formula [6]

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and from 15 to 5 wt% with respect to the whole pigment fraction of the yellow pigment which can be represented by structural formula [7]

and the red dye mixture contains from 30 to 60 wt% with respect to the whole pigment fraction of a red pigment which can be represented by structural formula [8]

wherein R^4 represents a C_1 to C_3 alkoxy C_1 to C_3 alkyl group, from 70 to 20 wt% with respect to the whole pigment fraction of the red pigment which can be represented by the structural formula [9]

and from 0 to 20 wt% with respect to the whole pigment fraction of a red pigment which can be represented by structural formula [10] WO 2005/005552 PCT/EP2004/007021 29

wherein R⁵ represents a hydrogen atom, a chlorine atom or a bromine atom, or [11]

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wherein one of R⁶ and R⁷ is a hydrogen atom and the other is hydroxyethoxyethyl, hydroxybutoxypropyl, acetoxyethoxyethyl or acetoxybutoxypropyl.

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- 3. A method of dyeing polyester-based fibers in which a blue dye mixture as disclosed in claim 1 or a dye composition as disclosed in claim 2 is used.
- 4. A dyed polyester-based fiber material which has been dyed using a blue dye mixture as disclosed in claim 1 or a dye composition as disclosed in claim 2.
 - 5. A method of dyeing polyester-based fibers according to claim 3 in which the polyester-based fibers are mixed fibers of different fineness
- 6. A dyed polyester-based fiber material according to claim 4 in which the polyester-based fibers are mixed fibers of different fineness.

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- 7. A method of dyeing polyester-based fibers according to claim 3 in which the polyester-based fibers are mixed fibers comprising polyester-based fibers which can be dyed with a cationic dye and regular polyester-based fibers.
- 8. A dyed polyester-based fiber material according to claim 4 in which the polyester-based fibers are mixed fibers comprising polyester-based fibers which can be dyed with a cationic dye and regular polyester-based fibers.